OPERATOR'S MANUAL

8 HP TILLER ATTACHMENT

Model Number 190-758

IMPORTANT: READ SAFETY RULES AND INSTRUCTIONS CAREFULLY

Warning: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 368022 Cleveland, Ohio 44136-9722.

MTD PRODUCTS INC. P.O. BOX 368022 CLEVELAND, OHIO 44136-9722

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SECTION 1: IMPORTANT SAFE OPERATION PRACTICES

WARNING: THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. WHEN YOU SEE THIS SYMBOL- HEED ITS WARNING.

Danger: This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

1. GENERAL OPERATION

- Read, understand, and follow all instructions in the manual before attempting to attach and operate your tiller. Keep this manual in a safe place for future reference and for ordering replacement parts.
- Only allow responsible adults familiar with both the tiller and tractor instructions to operate the machine. Know controls and how to stop the machine quickly.
- Do not put hands or feet under or near rotating parts. Keep clear of tiller tines at all times.
- Clear the area of objects such as rocks, toys, wire, etc. which could become caught in the tiller tines. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair, to protect eyes from foreign objects.
- Be sure the area is clear of other people and pets before tilling. Stop machine if anyone enters area.
- Never carry passengers. Only the operator should ride on the unit and only ride in the seat.
- Disengage tiller before shifting into reverse and backing up. Always look down and behind before and while backing.
- Slow down before turning. Operate the tractor smoothly. Avoid erratic operation and excessive speed.
- Never leave a running machine unattended. Always disengage attachment, place transmission in neutral, set park brake, stop engine and remove key before dismounting.
- Raise and disengage tiller before making sharp turns. Leaving tiller lowered and engage may adversely offset steering/control of machine.
- Disengage tiller when not tilling.
- Stop engine and wait until tiller comes to a complete stop before making any repairs, adjusting or removing any rocks or debris.
- Till only in good daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck. This unit should not be driven up or down a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load or unload properly.
- Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Do not wear loose fitting clothes or jewelry. They can be caught in moving parts. Never operate a unit in bare feet, sandals, or sneakers.
- Check overhead clearance carefully before driving under power lines, wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
- Disengage all attachment clutches, thoroughly depress the brake pedal, and shift into neutral before attempting to start engine.

2. Slope Operation

- Slopes are a major factor related to loss of control and tip-over accidents which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not till on it.

DO:

- Till up and down slopes, not across.
- Remove obstacles such as rocks, limbs, etc.
- Watch for holes, ruts, bumps, and objects hidden under the soil (e.g. rocks). Uneven terrain could overturn the machine.
- Use slow speed. Choose a low enough gear so that you will not have to stop or shift while on the slope. Always keep tractor in gear when going down slopes to take advantage of engine braking action.

- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction. Rapid engagement or braking could cause the front of the machine to lift.
- Avoid starting or stopping on a slope. If tires loose traction, disengage tiller and proceed slowly straight down the slope.
- For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15 degrees as shown on the slope gauge, do not operate this unit on that area or serious injury could result.

DO NOT:

- Do not turn on slopes unless necessary; then, turn slowly and gradually downhill, if possible.
- Do not operate unit near drop-offs, ditches or embankments. A wheel over the edge or an edge caving in could cause sudden overturn.
- Do not operate tractor on wet grass. Reduced traction could cause sliding.
- Do not try to stabilize the machine by putting your foot on the ground.

3. Children

- Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the tilling activity. Never assume that children will remain where you last saw them.
- Keep children out of the tilling area and in watchful care of an adult other than the operator.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and down for small children.
- Never carry children. They may fall off and be seriously injured or interfere with the safe machine operation.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees or other objects that may obscure vision.

4. Service

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
- Use only an approved container.
- Never remove gas cap or add fuel with the engine running. Allow engine to cool at least two minutes before refueling. Do not smoke.
- Never refuel the machine indoors.
- Never store the machine or fuel container inside where there is an open flame, or spark, such as a water heater, space heater, clothes dryer and the like.
- Never run a machine inside a closed area.
- Check frequently and keep nuts and bolts tight and keep equipment in safe working condition.
- Never tamper with safety devices. Check their proper operation regularly. Use all guards as instructed in this manual.
- To reduce fire hazard, keep machine free of grass, leaves or other debris build-up. Clean up oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment for damage if you strike an object (e.g. rock). Repair, if necessary, before re-starting and operating the machine.
- Never make adjustments or repairs with the engine running.
- Check brake operation frequently. Adjust and service as required.
- Muffler, engine, and belt guards become hot during operation and can cause a burn. Allow to cool down before touching.
- Do not change the engine governor settings or overspeed the engine.

Danger: Your unit was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.

SECTION 1: UNPACKING

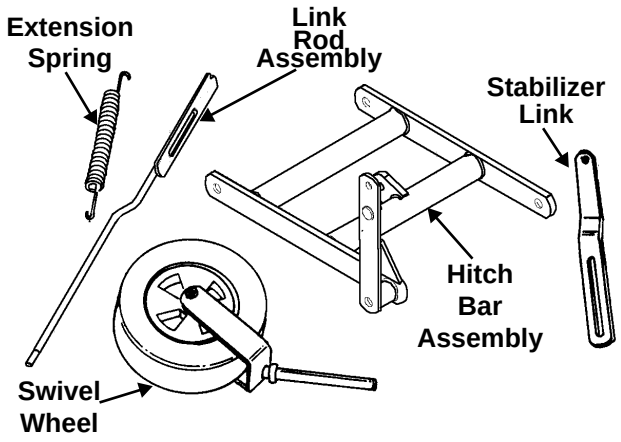


Figure 1

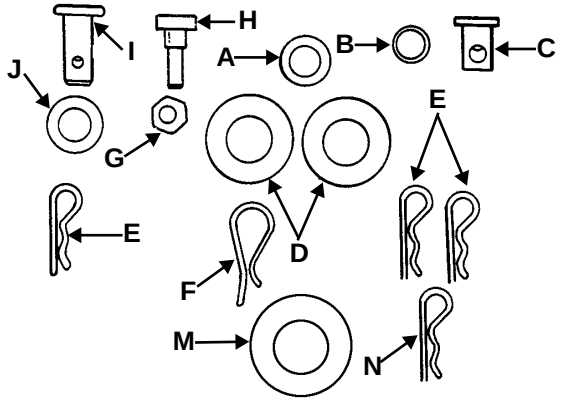


Figure 2

Remove the tiller, all loose parts and hardware pack from the carton before discarding the carton.

Contents of Hardware Pack:
(See Figure 2)

A (1) Flat Washer 1/2" I.D. x 1" O.D.
B (1) Sleeve
C (1) Ferrule
D (2) Large Flat Washers
E (3) Hairpin Clips
F (1) Hairpin Clip
G (1) Hex Nut 5/16-18 Thread
H (1) Shoulder Bolt
I (1) Clevis Pin
J (1) Flat Washer 1/2" I.D. x 15/16" O.D.
K (1) Spacer (Not Shown)
L (1) Lock Washer (Not Shown)
M (1) Flat Wash 5/8 ID x 1 1/4 OD
N (1) Hairpin

For shipping purposes, the engine oil dipstick has been placed between the engine and the gas tank. Insert dipstick into oil fill tube before operating the unit.

SECTION 2: ASSEMBLY INSTRUCTIONS

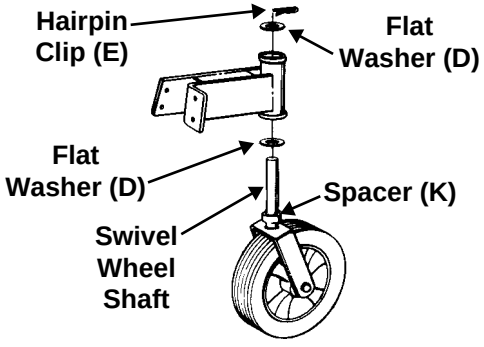


Figure 3

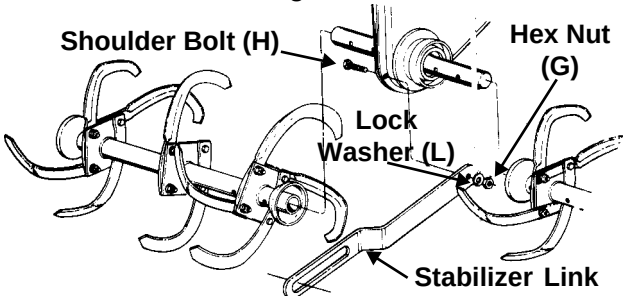


Figure 4

IMPORTANT: This unit is shipped WITHOUT GASOLINE or OIL. After assembly, service engine with gasoline and oil as instructed in the separate engine manual packed with your unit.

NOTE: Reference to right or left hand side of the mower is observed from the operating position.

1. Place spacer (K), then one flat washer (D) over swivel wheel shaft. Place swivel wheel in position on tiller. See Figure 3. Next, place other flat washer (D) over swivel wheel shaft. Secure with hairpin clip (E). See Figure 3.

2. Assemble the stabilizer link to front of chain case on tiller. Secure with shoulder bolt (H), lock washer (L) and hex nut (G). See Figure 4.

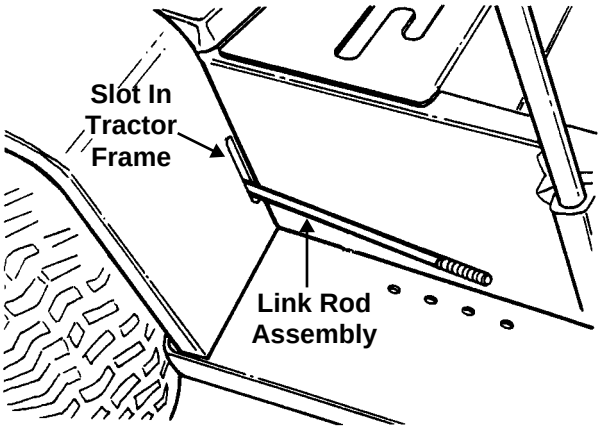


Figure 5

3. Place the link rod assembly through the slot in the tractor fender. See Figure 5.

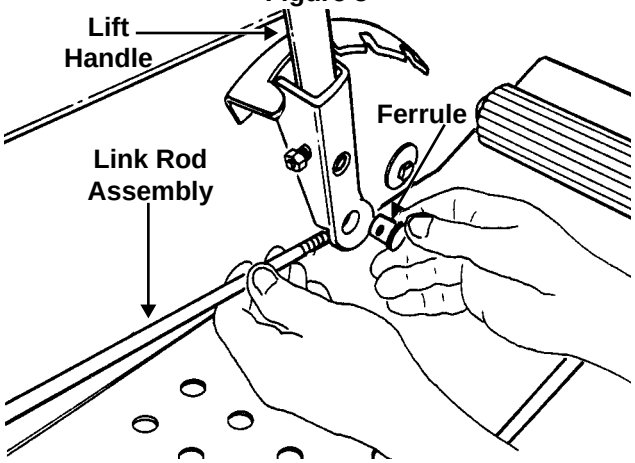


Figure 6

4. Thread ferrule (C) onto link rod assembly until approximately 1/4" of threads are showing. Place ferrule (C) through hole in bottom of lift handle on tractor. Slide washer (M) onto ferrule (C) and secure with hairpin clip (N). See Figure 6.

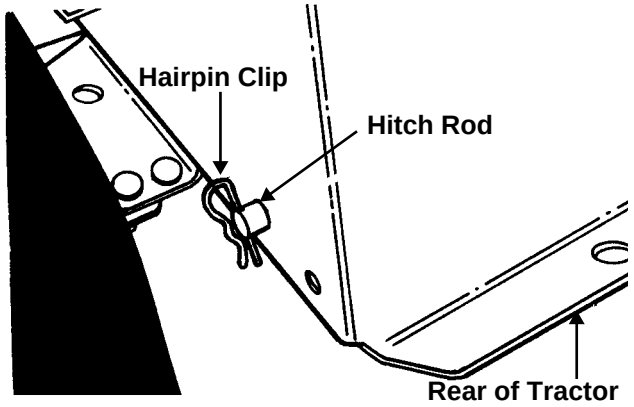


Figure 7

5. Remove the hitch rod from the rear of your tractor by removing the two hairpin clips. See Figure 7.

NOTE: *On 16 horsepower tractors, it is necessary to hold up the gasoline tank when removing and replacing the hitch rod.*

6. Place new hitch rod (longer) in position on rear of tractor. See Figure 7.

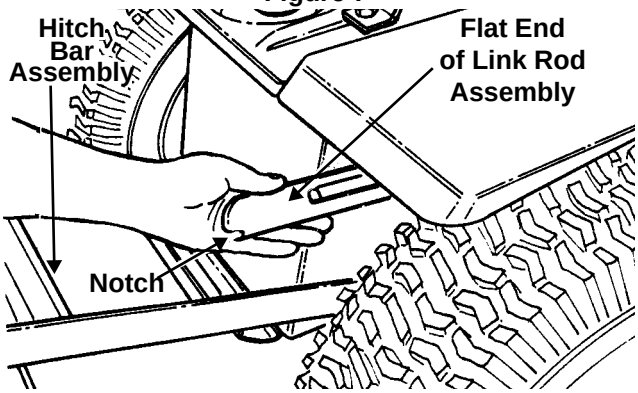


Figure 8

7. Place hitch bar assembly in position over ends of hitch rod and secure with hairpin cotters provided with tractor hitch bar. See Figure 8.
8. Turn flat end of link rod assembly so that the notch is down. See Figure 8.

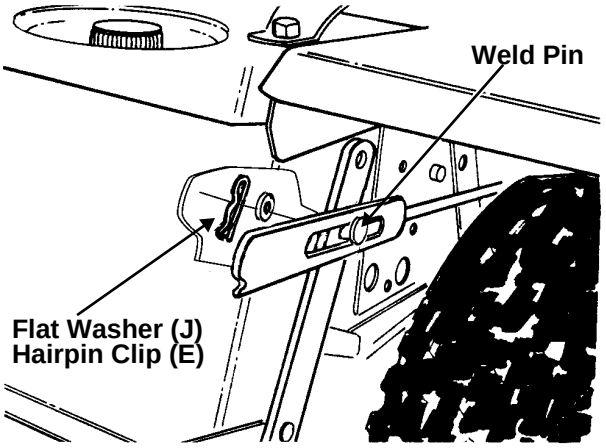


Figure 9

9. Lift hitch bar assembly up and place sleeve (B) over weld stud on hitch bar. Next, place link rod over sleeve and secure with one flat washer (J) and hairpin clip (E). See Figure 9.

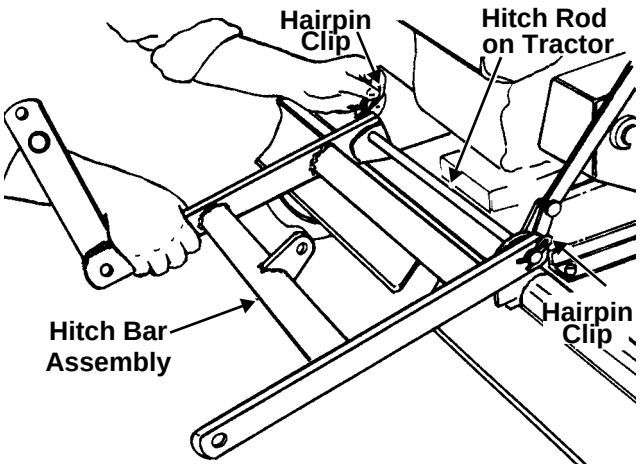


Figure 10

10. Back the tractor up to the tiller and hook the hitch bar assembly to it. See Figure 10.

NOTE: *Figure 10 is shown without the tractor for clarity.*

11. Remove one hairpin clip from hitch rod on tiller, line up hitch bar assembly and install hitch rod. Secure with hairpin clip. See Figure 10.

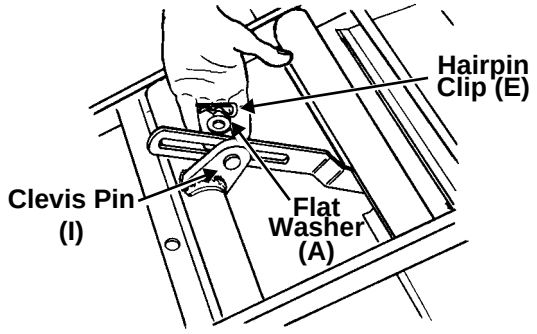


Figure 11

12. Secure the stabilizer link to the hitch bar assembly with clevis pin (I), flat washer (A) and hairpin clip (E), as shown in Figure 11.

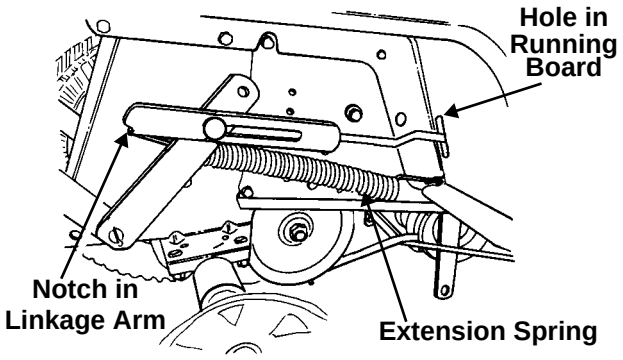


Figure 12

13. Using a piece of wire, hook one end of extension spring in the hole on the running board and the other end of spring to the notch in the linkage rod. See Figure 12. (On units with a one piece fender, remove one bolt which secures the bracket to the running board, closest to the frame, in order to attach the spring.)

NOTE: *Figure 12 is shown with the rear wheel removed for clarity. It is not necessary to remove for assembly.*

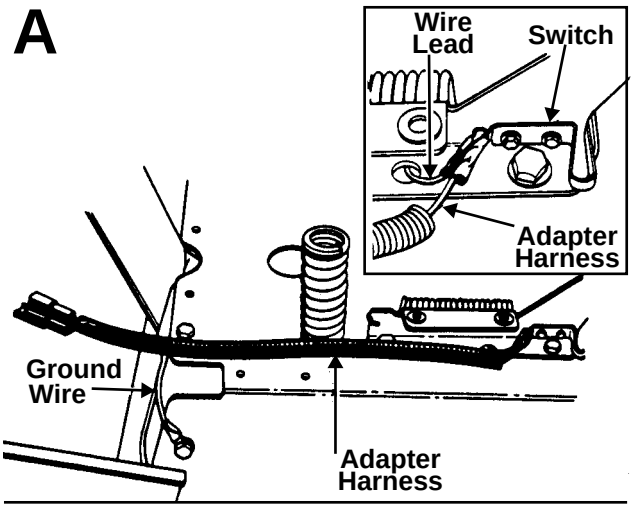


Figure 13

14. There are two different types of seat safety switches. Refer to Figure 13A and Figure 13B.

If the seat switch on your tractor is as shown in Figure 13A, assemble the adapter harness as follows.

- On units with a one-piece fender, first remove the fender from the unit by removing for self-tapping screws from the top of the fender, and four bolts, lock washers and nuts from the fender and running boards.
- Unplug the wire lead from the switch located on the right hand seat bracket. Plug the end of the adapter harness into the switch on the seat bracket.
- Plug the wire lead on the tractor into the same end of the adapter harness.
- Attach the ground wire to a bolt on the tractor frame.
- Plug the other end of the wire adapter into the wire harness on the tiller.

NOTE: *It is not necessary to remove the wire adapter from your unit when the tiller is removed.*

If your tractor is equipped with a plug on the seat as shown in Figure 13B, connect the wire harness on the tiller to the tractor as follows. Disconnect the wire lead under the seat of the tractor from the wire harness on the tractor. Connect the plug on the tiller wire harness to the wire lead on the seat. See Figure 13B.

WARNING: When removing the tiller attachment, make certain to reconnect the wire lead under the seat to the wire harness on the tractor. Failure to do so could result in serious personal injury. The seat switch is a safety device, designed for your protection. Never attempt to bypass its operation.

15. Raise and lower the tractor lift lever a couple of times to make sure that the tiller tines are going up and down.

This tiller attachment is not designed to be raised off the ground by the tractor lift lever. It is designed to trail behind the tractor. The lift lever is only used to raise the lower the tines.

SECTION 3: OPERATION

GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual packed with your mower. Read instructions carefully.

WARNING: Never fill fuel tank indoors, with engine running or until the engine has been allowed to cool for at least two minutes after running.

TO START ENGINE

1. Attach spark plug wire to spark plug.
2. Place the tine clutch rod in the **disengaged** position. See Figure 14.

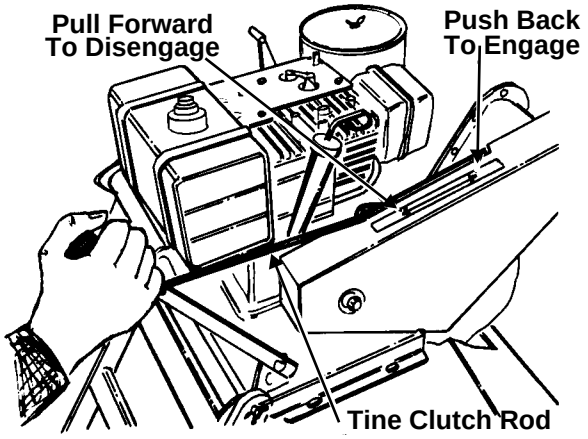


Figure 14

3. Push the CHOKE lever down all the way. Set the throttle in the FAST position. See Figure 15.

NOTE: *A warm engine requires less choking.*

4. Grasp the recoil starter handle and pull back rapidly, extending rope fully. Return it slowly to the engine.
5. After engine starts, move choke lever gradually to OFF position.

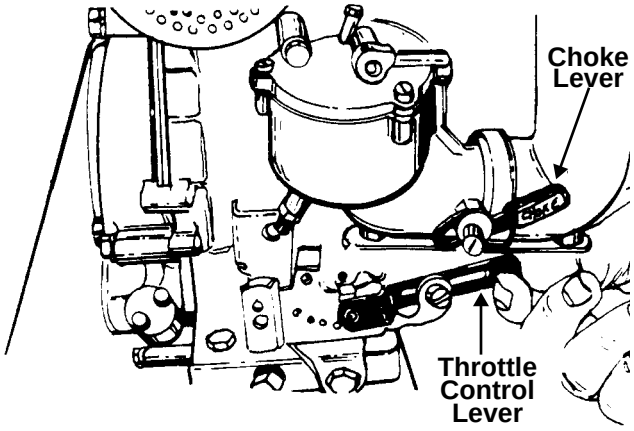


Figure 15

TO STOP ENGINE

1. To stop the engine, move the throttle control lever to the STOP position.
2. Disconnect the spark plug wire and ground it against the engine to prevent accidental starting while equipment is unattended.

SECTION 4: MAINTENANCE

WARNING: Be sure to disconnect and ground the spark plug wire before performing any repairs or maintenance.

ENGINE

Refer to the separate engine manual for engine maintenance instructions.

Maintain **engine oil** as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.

Service **air cleaner** every 25 hours under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced. To service the air cleaner, refer to the separate engine manual packed with your unit.

The **spark plug** should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each season; check engine manual for correct plug type and gap specifications.

Clean the engine regularly with a cloth or brush. Keep the cooling system (blower housing area) clean to permit proper air circulation which is essential to engine performance and life. Be certain to remove all dirt and combustible debris from muffler area.

CHAIN CASE LUBRICATION

The chain case is sealed at the factory and does not require checking or changing.

If the chain case is disassembled for repair, replace the grease with 12 ounces of plastilube “0” grade grease (factory number 737-0133-14 ounce container).

BELT REPLACEMENT

1. Remove the tine clutch rod by removing the cotter pin in the hooked end of rod. See Figure 16.

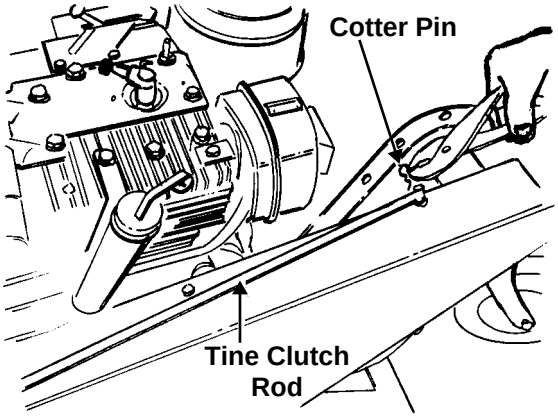


Figure 16

2. Slide the tine clutch rod out of the belt cover.
3. Remove the belt cover by removing three hex head self-tapping screws with a 3/8" wrench. See Figure 17.

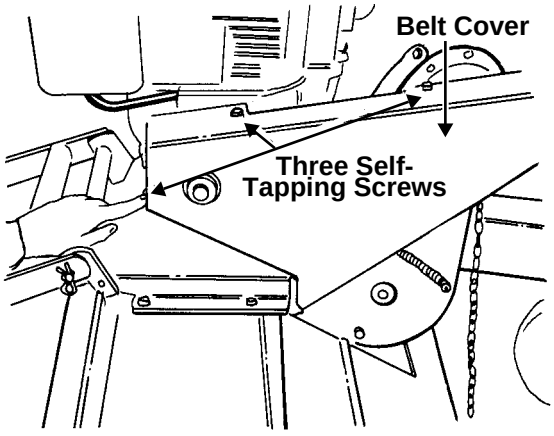


Figure 17

4. Move the idler bracket forward (disengaged position) to remove the belt tension. Lift the belt off the engine pulley and chain case pulley. See Figure 18.
5. Using two 9/16" wrenches, remove the hex lock nut holding the idler pulley and idler belt keeper.

NOTE: *Upon reassembly of new belt, the idler pulley must be installed with the hub side towards the chain case.*

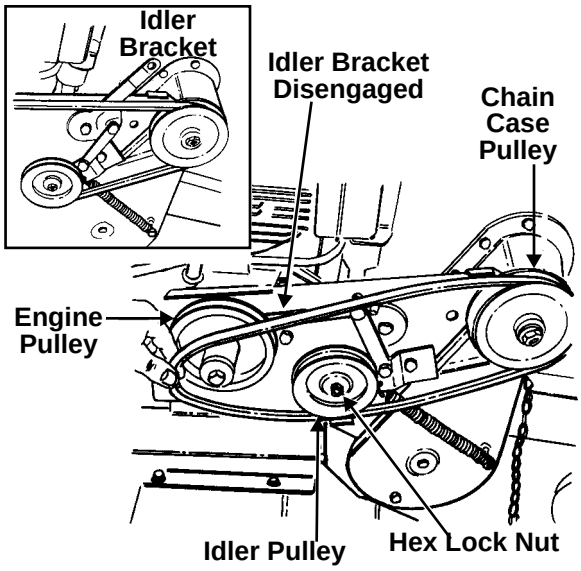


Figure 18

6. Reverse step 1 through step 5 to install the new belt.

SECTION 5: OFF-SEASON STORAGE

The following steps should be taken to prepare the tiller for storage.

1. Clean tiller thoroughly.
2. Refer to engine manual for correct engine storage instructions.
3. Coat tines with chassis grease to prevent rusting.
4. Store tiller in a dry, clean area. Do not store next to corrosive materials, such as fertilizer.

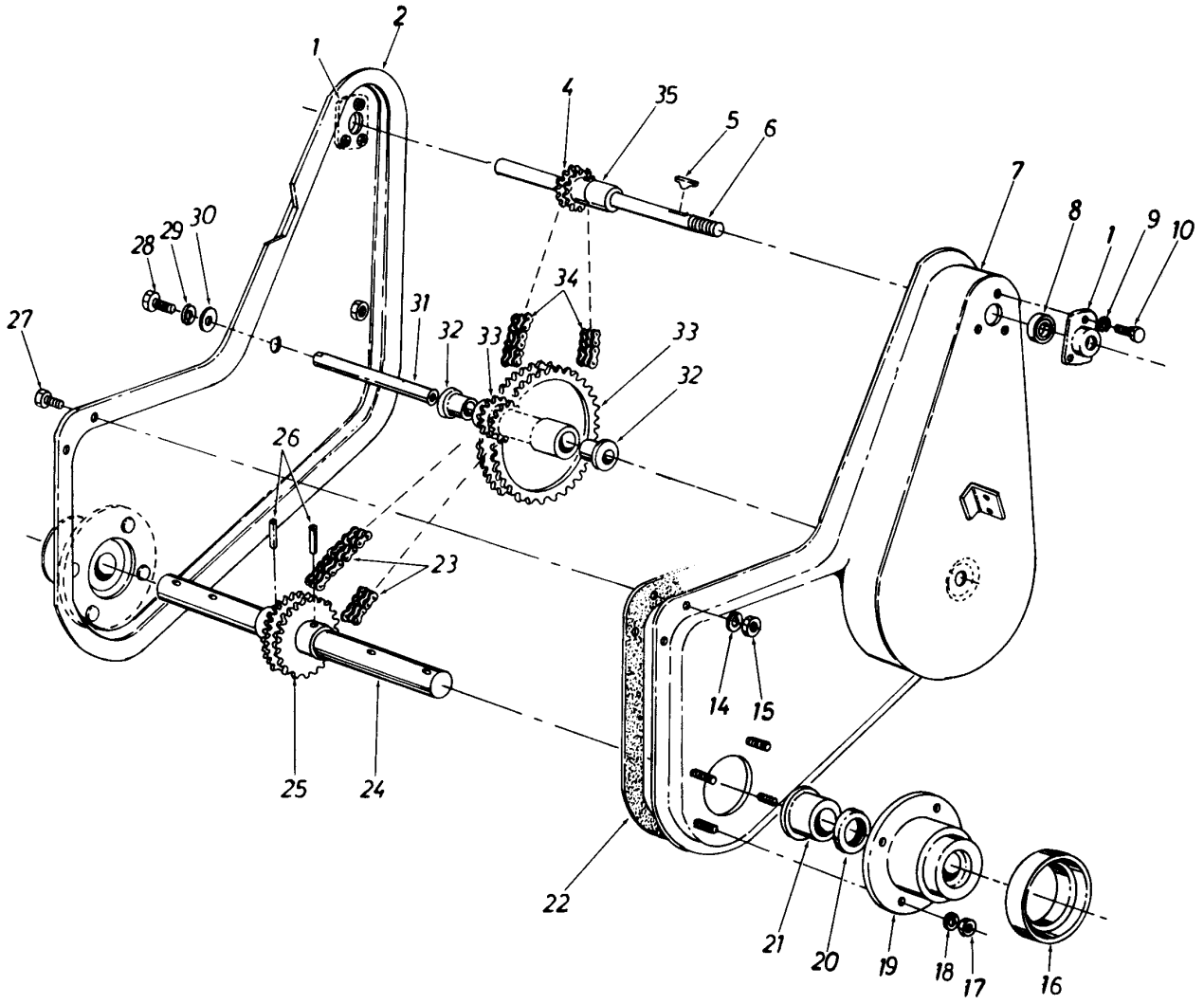
NOTE: *When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rust-proof the equipment. Using a light oil or silicone, coat the equipment, especially cables and all moving parts.*

SECTION 6: OPTIONAL EQUIPMENT

ACCESSORIES	PART NUMBER
Agricultural Traction Tires	OEM-190-859 OEM-190-865*
100 lb. Wheel Weights (2 per set / 50 lbs. each)	OEM-190-784
Electric Lift Kit	OEM-190-749

*For use with 1997 or newer tractor.

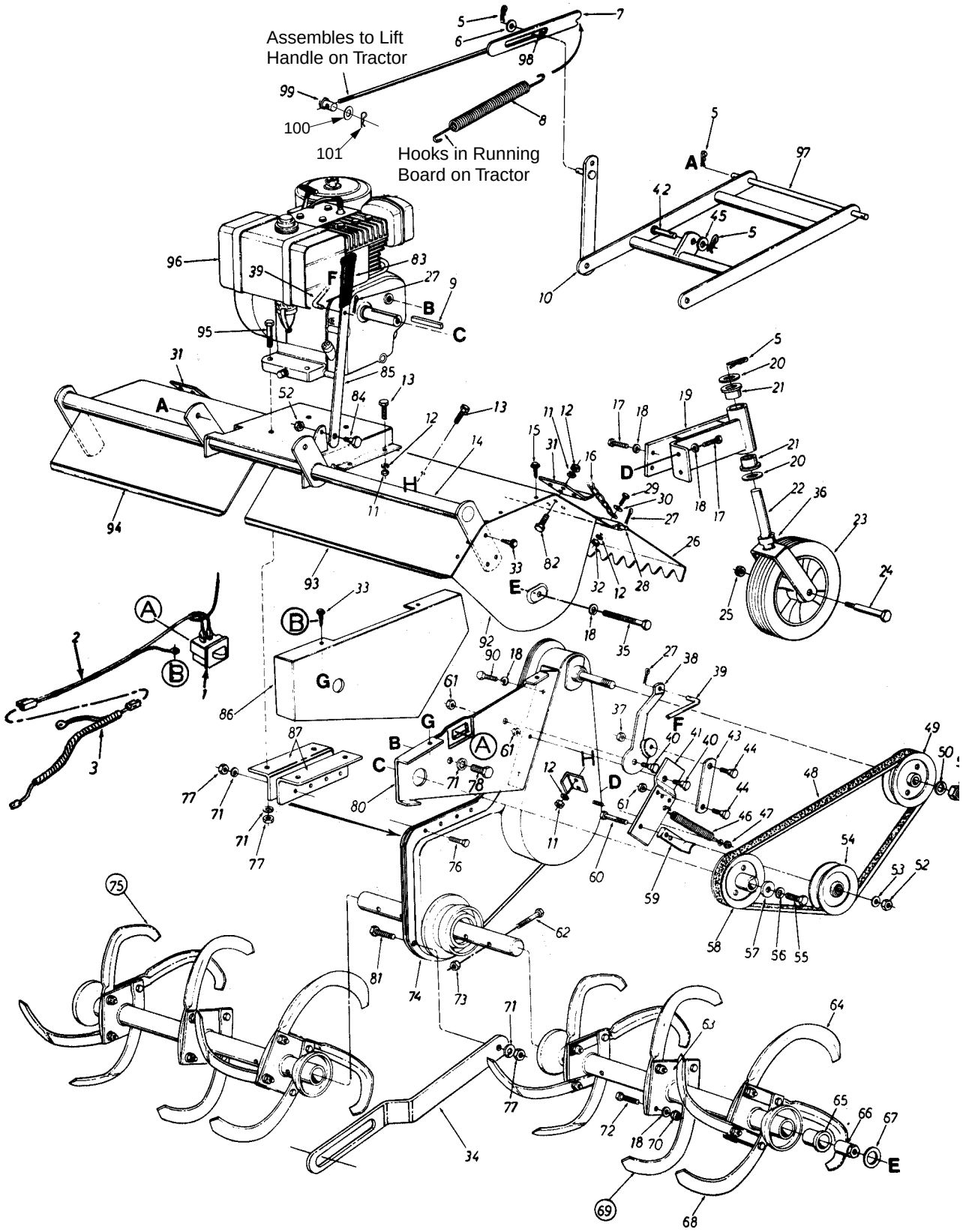
Model 758



PARTS LIST FOR CHAIN CASE ASSEMBLY COMPLETE 04991

Ref. No.	Part No.	Code	Description	Ref. No.	Part No.	Code	Description
1	05034		Bearing Housing 1.375" Dia.	22	721-0119		Gasket
2	14895		Housing Assembly—R.H.	23	713-0150		Roller Chain #40-2 x 34.0" Lg.
5	714-0136		#6 Hi-Pro Key 5/32" x .62" Lg.	24	711-0506		Tine Shaft
6	14892		Input Shaft Assembly	25	717-0189		Double Sprocket T24-2 Teeth 1/2" Pitch
7	14894		Housing Assembly—L.H.				
8	741-0155		Ball Bearing .62" I.D. x 1.38" O.D.	26	715-0125		Spiral Pin 3/8" Dia. x 2.00" Lg.
				27	710-0258		Hex Bolt 1/4-20 x .62" Lg.*
9	736-0329		L-Wash. 1/4" I.D.*	28	710-0118		Hex Bolt 5/16-18 x .75" Lg.
10	710-0258		Hex Bolt 1/4-20 x .62" Lg.*	29	736-0119		L-Wash. 5/16" I.D.*
14	736-0329		L-Wash. 1/4" I.D.	30	736-0195		Fl-Wash. 5/16" I.D.
15	712-0287		Hex Cent. L-Nut 1/4-20 Thd.	31	711-0504		Sprocket Shaft
16	04973		Dust Cap Cover	32	748-0855		Flange Bearing .62" I.D. x .75" O.D.
17	712-0158		Hex Cent. L-Nut 5/16-18 Thd.				
18	736-0119		L-Wash. 5/16" I.D.*	33	04529		Double Sprocket Assembly
19	04530		Cast Bearing Housing	34	713-0149		Roller Chain #35-2 x 36.75" Lg.
20	721-0117		Oil Seal				
21	748-0194		Flange Bearing 1.25" I.D. x 1.75" O.D.	35	748-0192		Spacer 5/8" I.D. x 7/8" O.D.

Model 758


Assembles to Lift Handle on Tractor
Hooks in Running Board on Tractor

Model 758

Ref. No.	Part No.	Description
1	725-0713	Safety Switch
2	725-1290	Wire Harness
3	725-1393	Adapter Harness
5	714-0147	Internal Cotter Pin
6	736-0179	Fl-Wash. 1/2" I.D. x .93" O.D.
7	638-0016	Link Rod Assembly
8	732-0390	Extension Spring 1.25" O.D. x 12.75" Lg.
9	714-0114	Sq. Key 1/4" x 1/4" x 2.00" Lg.
10	689-0004	Hitch Bar Assembly
11	712-0138	Hex Nut 1/4-28 Thd.*
12	736-0329	L-Wash. 1/4" I.D.*
13	710-0195	Hex Bolt 1/4-28 x .62" Lg.
14	04966	Support Frame Assembly
15	710-0429	Hex Hd. “B”-Tap Scr. #10 x .62" Lg.
16	727-0225	#2 Dog Chain x 20" Lg. (2 Req’d.)
17	710-0623	Hex Wash. Hd. Self-Tap Scr. 3/8-24 x .75" Lg.
18	736-0169	L-Wash. 3/8" I.D.*
19	04978	Swivel Wheel Support
20	736-0188	Fl-Wash. 3/4" I.D. x 1.50" O.D.
21	741-0382	Flange Bearing 3/4" I.D. x 1.00" O.D.
22	04981	Swivel Wheel Caster
23	734-0979	Wheel Assembly 10.0 x 2.75
24	738-0476	Shoulder Bolt .623" I.D. x 3.62" Lg.
25	712-0290	Hex Cent. L-Nut 7/16-14 Thd.
26	04985	L.H. Shield Hinge Flap
	04986	R.H. Shield Hinge Flap (Not Shown)
27	714-0115	Cotter Pin 1/8" Dia. x 1.00" Lg.*
28	747-0340	L.H. Flap Rod
	747-0339	R.H. Flap Rod (Not Shown)
29	710-0258	Hex Bolt 1/4-20 x .62" Lg.*
30	736-0173	Fl-Wash. 1/4" I.D.
31	14891	Brace—Tine Shield
32	712-0287	Hex Nut 1/4-20 Thd.*
33	710-0776A	Hex Wash. Hd. Self-Tap Scr. 1/4" x .62" Lg.
34	14890	Stabilizer Link
35	710-0342	Hex Bolt 3/8-16 x 1.25" Lg.*
36	711-0469	Spacer .752" I.D. x 1.25" O.D.
37	712-0158	Hex Cent. L-Nut 5/16-18 Thd.
38	04987	Clutch Lever
39	747-0379	Clutch Rod
40	738-0140	Shoulder Bolt 7/16" Dia. x 1.75"
41	04992	Idler Bracket
42	711-0310	Clevis Pin
43	747-0342	Clutch Link 3.62" Lg.
44	738-0155	Shoulder Bolt .435" Dia. x .160"
45	736-0273	Fl-Wash. .50" I.D. x 1.0" O.D. x .06
46	732-0384	Extension Spring .62" O.D. x 6.12" Lg.
47	712-0214	Hex Crown Nut 3/8-24 Thd.
48	754-0253	“V”-Belt (Kevlar)
49	756-0351	1/2" “V”-Pulley 4.75" O.D. x .625" Bore
50	736-0158	L-Wash. 5/8" I.D.*
51	712-0221	Hex Ins. L-Nut 5/18-16 Thd.
52	712-0375	Hex Cent. L-Nut 3/8-16 Thd.
53	736-0140	Fl-Wash. 3/8" I.D.
54	756-0293A	Idler Pulley 4.0" O.D.
55	710-0314	Hex Bolt 7/16-20 x 1" Lg.
56	736-0171	L-Wash. 7/16" I.D.*
57	736-0319	Fl-Wash. 7/16" I.D. x 1.38"
58	756-0350	1/2" “V”-Pulley .475" O.D. x 1.00" Bore
59	13819	Belt Guard
60	710-0520	Hex Bolt 3/8-16 x 1.50" Lg.*
61	712-0158	Hex Cent. L-Nut 5/16-18 Thd.
62	710-0780	Hex Bolt 7/16-14 x 2.00" Lg.
63	04970	Tine Adapter Assembly
64	742-0243	Tine—L.H.
65	731-0374	Flange Bearing 1.00" I.D.
66	748-0276	Spacer
67	736-0281	Thrust Wash. 1/2" I.D. x 1.55"
68	742-0244	Tine—R.H.
69	04995	Tine Assembly Comp.—L.H.
70	712-0241	Hex Nut 3/8-24 Thd.*
71	736-0119	L-Wash. 5/16" I.D.*
72	710-0459	Hex Bolt 3/8-24 x 1.5" Lg.*
73	712-0290	Hex Cent. L-Nut 7/16-14 Thd.
74	04991	Chain Case Ass’y. Comp.
75	04996	Tine Assembly Comp.—R.H.
76	710-0376	Hex Bolt 5/16-18 x 1.00" Lg.*
77	712-0267	Hex Nut 5/16-18 Thd.*
78	710-0237	Hex Bolt 5/16-24 x .62"
80	04988A	Clutch Support Bracket
81	738-0296	Shld. Bolt .435" Dia. x .265" 5/16-18 Thd.
82	710-0412	Hex Bolt 1/4-28 x .75" Lg.
83	720-0142	Plastic Grip
84	738-0183	Shoulder Bolt .498" Dia. x .212" Lg.
85	747-0378	Clutch Handle
86	14298	Clutch Support Shroud
87	04519	Engine Mounting Bracket
90	710-0201	Hex Bolt 3/8-16 x .62" Lg.
92	04975	L.H.—Side Plate
	04976	R.H.—Side Plate (Not Shown)
93	04983	L.H.—Tine Shield
94	04984	R.H.—Tine Shield
95	710-0116	Hex Bolt 5/16-18 x 2.00" Lg.*
96	—	8 H.P. Engine
97	738-0992	Hitch Rod
98	750-0336	Push Bar Sleeve .503" I.D. x .624" O.D.
99	711-0770	Ferrule
100	736-0187	Flat Wash 5/8 ID x 1 1/4 OD
101	714-0145	Hairpin clip

SECTION 7: TROUBLE SHOOTING GUIDE

Trouble	Possible Cause(s)	Corrective Action
Engine fails to start	Fuel tank empty, or stale fuel.	Fill tank with clean, fresh gasoline. Fuel will not last over thirty days unless a fuel stabilizer is used.
	Throttle control lever not in correct starting position (if so equipped).	Move throttle lever to start position.
	Blocked fuel line.	Clean fuel line.
	Dirty aircleaner.	Refer to the engine manual packed with your unit.
	Choke not in ON position.	Move switch to ON position.
	Spark plug wire disconnected.	Connect wire to spark plug.
	Faulty spark plug.	Clean, adjust gap or replace.
	Engine flooded.	Refer to the engine manual packed with your unit.
Engine runs erratic	Unit running on CHOKE.	Move choke lever to OFF position.
	Spark plug wire loose.	Connect and tighten spark plug wire.
	Blocked fuel line or stale fuel.	Clean fuel line; fill tank with clean, fresh gasoline. Fuel will not last over thirty days unless a fuel stabilizer is used.
	Vent in gas cap plugged.	Clear vent.
	Water or dirt in fuel system.	Drain fuel tank. Refill with fresh fuel.
	Dirty air cleaner.	Refer to the engine manual packed with your unit.
	Carburetor out of adjustment.	Refer to the engine manual packed with your unit.
Engine over-heats	Engine oil level low.	Fill crankcase with proper oil.
	Dirty air cleaner.	Refer to the engine manual packed with your unit.
	Air flow restricted.	Refer to the engine manual packed with your unit.
	Carburetor not adjusted properly.	Adjust carburetor as instructed in separate engine manual.
Tines do not engage	Foreign object lodged in tines.	Dislodge foreign object.
	Tine clevis pin(s) missing.	Replace tine clevis pin(s).
	Pulley and idler not in correct adjustment.	Take unit to authorized service dealer.
	Belt worn and/or stretched.	Replace belt.

Note: For repairs beyond the minor adjustments above, contact your local authorized service dealer.

MANUFACTURER'S LIMITED WARRANTY FOR:

YARD MACHINES by MTD®

For TWO YEARS from the date of retail purchase within the United States of America, its possessions and territories, MTD PRODUCTS INC will, at its option, repair or replace, for the original purchaser, free of charge, any part or parts found to be defective in material or workmanship. This warranty covers units which have been operated and maintained in accordance with the operating instructions furnished with the unit, and which have not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance or alteration.

Normal wear parts or components thereof are subject to separate terms as noted below in the "No Fault Ninety Day Consumer Warranty" clause.

All normal wear part failures will be covered on this product for a period of 90 days regardless of cause. After 90 days, but within the two year period, normal wear parts failures will be covered ONLY IF caused by defects in material or workmanship of OTHER component parts. Normal wear parts are defined as batteries*, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates and tires.

How to obtain service: Warranty service is available, with proof of purchase, through your local authorized service dealer. To locate the dealer in your area, please check the yellow pages or contact the Customer Service Department of MTD PRODUCTS INC, P. O. Box 368022, Cleveland, Ohio 44136-9722. Phone 1 (800) 800-7310. The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by the Customer Service Department of MTD PRODUCTS INC.

Transportation charges: Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser.

Units exported out of the United States: MTD PRODUCTS INC does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through MTD PRODUCTS INC's authorized channels of export distribution.

Other Warranties:

1. The engine or component parts thereof carry separate warranties from their manufacturers. Please refer to the applicable manufacturer's warranty on these items.
2. *Batteries are covered by a 90-day replacement warranty.
3. Log splitter pumps, valves and cylinders or component parts thereof are covered by a one year warranty.
4. All other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose, are hereby expressly disclaimed in their entirety.
5. The provisions as set forth in this warranty provide the sole and exclusive remedy of MTD PRODUCTS INC's obligations arising from the sales of its products. MTD PRODUCTS INC will not be liable for incidental or consequential loss or damage.

How state law relates to this warranty: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Certain disclaimers are not allowed in some states and therefore they may not apply to you under all circumstances.

NOTE: This warranty does not cover routine maintenance items such as lubricants, filters, blade sharpening and tune-ups, or adjustments such as brake adjustments, clutch adjustments or deck adjustments. Nor does this warranty cover normal deterioration of the exterior finish due to use or exposure.